PC-0028 US

What is claimed is:

1. An isolated mammalian cDNA or a fragment thereof encoding a mammalian protein or a portion thereof selected from:

- a) an amino acid sequence of SEQ ID NO:1 and SEQ ID NO:2;
- b) a variant having at least 80% identity to the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:2;
 - c) an antigenic epitope of SEQ ID NO:1 or SEQ ID NO:2;
 - an oligopeptide of SEO ID NO:1 or SEO ID NO:2; and
 - a biologically active portion of SEQ ID NO:1 or SEQ ID NO:2.
 - An isolated mammalian cDNA encoding a mammalian protein of SEQ ID NO:1 or SEQ ID NO:2.
 - An isolated mammalian cDNA or the complement thereof selected from:
 - a) a nucleic acid sequence of SEQ ID NO:3 and SEQ ID NO:10;
 - a fragment selected from SEQ ID NOs:4-9 and SEQ ID NOs:11-15;
- c) a variant selected from SEQ ID NOs:16-29 having at least 80% identity to the nucleic acid sequences of SEQ ID NO:3 or SEQ ID NO:10; and
 - d) an oligonucleotide of SEQ ID NOs:3-29.
 - 4. The composition comprising the cDNA or the complement of the cDNA of claim 1.
 - 5. A substrate comprising the complement of the cDNA of claim 1...
 - 6. A probe comprising the àDNA or the complement of the cDNA of claim 1.
 - 7. A vector comprising the cDNA of claim 1.
 - 8. A host cell comprising the vector of claim 7.
 - 9. A method for producing a protein, the method comprising:
 - a) culturing the host cell of claim 8 under conditions for protein expression; and
 - b) recovering the protein from the host cell culture.
 - 10. A transgenic cell line or organism comprising the vector of claim 7.
- 11. A method for using a cDNA to detect the differential expression of a nucleic acid in a sample comprising:
 - a) hybridizing the probe of claim 6 to the nucleic acids, thereby forming hybridization complexes; and
 - b) comparing hybridization complex formation with a standard, wherein the comparison indicates the differential expression of the cDNA in the sample.
 - 12. The method of claim 11 further comprising amplifying the nucleic acids of the sample prior to

10

25

15

30

PC-0028 US hybridization.

5

10

15

20

- 13. The method of claim 11 wherein detection of differential expression of the cDNA is diagnostic of colon disorders, particularly colon cancer, Crohn's disease, and ulcerative colitis.
- 14. A method of using a cDNA to screen a plurality of molecules or compounds, the method comprising:
 - a) combining the cDNA of claim 1 with a plurality of molecules or compounds under conditions to allow specific binding; and
 - b) detecting specific binding, thereby identifying a molecule or compound which specifically binds the cDNA.
- 15. The method of claim 14 wherein the molecules or compounds are selected from DNA molecules, RNA molecules, peptide nucleic acids, artificial chromosome constructions, peptides, transcription factors, repressors, and regulatory molecules.
 - 16. A purified mammalian protein or a portion thereof selected from:
 - a) an amino acid sequence of SEQ ID NO:1 and SEQ ID NO:2;
- b) a variant having at least 80% identity to the amino acid sequence of SEQ ID NO:1 or SEQ ID NO:2;
 - c) an antigenic epitope of SEQ ID NO:1 or SEQ ID NO:2;
 - d) an oligopeptide of SEQ ID NO:1 or SEQ ID NO:2; and
 - e) a biologically active portion of SEQ ID NO:1 or SEQ ID NO:2.
 - 17. A composition comprising the protein of claim 16.
- 18. A method for using a protein to screen a plurality of molecules or compounds to identify at least one ligand, the method comprising:
 - a) combining the protein of claim 16 with the molecules or compounds under conditions to allow specific binding; and
 - b) detecting specific binding, thereby identifying a ligand which specifically binds the protein.
- 19. The method of claim 18 wherein the molecules or compounds are selected from DNA molecules, RNA molecules, peptide nucleic acids, peptides, proteins, mimetics, agonists, antagonists, antibodies, immunoglobulins, inhibitors, and drugs.
 - 20. A method of using a mammalian protein to prepare and purify antibodies comprising:
 - a) immunizing an animal with the protein of claim 16 under conditions to elicit an antibody response;
 - b) isolating animal antibodies;

30

25

PC-0028 US

- c) attaching the protein to a substrate;
- d) contacting the substrate with isolated antibodies under conditions to allow specific binding to the protein;
 - e) dissociating the antibodies from the protein, thereby obtaining purified antibodies.

51